401 KAR 11:040. Water treatment and distribution system operators; classification and qualifications.

RELATES TO: KRS 223.160 - 223.220, 224.10-100, 224.10-110 STATUTORY AUTHORITY: KRS 223.160 - 223.220, 224.10-100, 224.10-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the cabinet to promulgate administrative regulations concerning the certification of water operators. KRS 224.10-110 requires the cabinet to establish programs and enforce cabinet administrative regulations for the certification of water plant operators. KRS 223.160 through 223.220 authorizes the cabinet to establish qualifications and examinations, and issue certificates for, water plant operators. This administrative regulation establishes classification of water treatment and distribution operator certifications and establishes the qualifications for certification.

Section 1. Classification of Water Operator Certifications.

- (1) Water treatment certifications.
- (a) Limited certification. An operator issued a limited certificate may have primary responsibility for a water treatment facility for a school and for a semipublic water supply as established in KRS 223.160.
 - (b) Class IA-D treatment certification. A Class IA-D treatment operator:
- 1. May be in direct responsible charge for a Class IA-D or Class IB-D water treatment plant as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water treatment plant with a larger design capacity.
 - (c) Class IB-D treatment certification. A Class IB-D treatment operator:
- 1. May be in direct responsible charge for a Class IB-D water treatment plant as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water treatment plant with a larger design capacity.
 - (d) Class IIA treatment certification. A Class IIA treatment operator:
- 1. May be in direct responsible charge for a Class IIA water treatment plant or a Subclass A or B water treatment plant of an equal to or smaller design capacity as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water treatment plant with a larger design capacity.
 - (e) Class IIB-D treatment certification. A Class IIB-D treatment operator:
- 1. May be in direct responsible charge for a Class IIB-D water treatment plant or a Subclass B water treatment plant of a smaller design capacity as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water treatment plant with a larger design capacity.
 - (f) Class IIIA treatment certification. A Class IIIA treatment operator:
- 1. May be in direct responsible charge for a Class IIIA water treatment plant or a Subclass A or B water treatment plant of an equal to or smaller design capacity as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water treatment plant with a larger design capacity.
 - (g) Class IIIB treatment certification. A Class IIIB treatment operator:
- 1. May be in direct responsible charge for a Class IIIB water treatment plant or a Subclass B water treatment plant of a smaller design capacity as established in 401 KAR 8:030; and

- 2. Shall not be in direct responsible charge for a water treatment plant with a larger design capacity.
- (h) Class IVA treatment certification. A Class IVA treatment operator may be in direct responsible charge of any Subclass A or B water treatment plant as established in 401 KAR 8:030.
- (i) Class IVB treatment certification. A Class IVB treatment operator may be in direct responsible charge of any Subclass B water treatment plant, as established in 401 KAR 8:030.
 - (2) Water distribution certifications.
 - (a) Class ID distribution certification. A Class ID distribution operator:
- 1. May be in direct responsible charge for a Class ID water distribution system as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water distribution system serving a larger population.
 - (b) Class IID distribution certification. A Class IID distribution operator:
- 1. May be in direct responsible charge for a Class IID water distribution system as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water distribution system serving a larger population.
 - (c) Class IIID distribution certification. A Class IIID distribution operator:
- 1. May be in direct responsible charge for a Class IIID water distribution system as established in 401 KAR 8:030; and
- 2. Shall not be in direct responsible charge for a water distribution system serving a larger population.
- (d) Class IVD distribution certification. A Class IVD distribution operator may be in direct responsible charge of any water distribution system.
- (3) Bottled water certification. A bottled water operator may be in direct responsible charge for a bottled water system that bottles water for sale.
 - (4) Operator in Training designations.
- (a) A certified operator with an Operator in Training designation shall not be in direct responsible charge of a water treatment plant or distribution system as established in this subsection and in 401 KAR 8:030.
- (b) A Class I Operator In Training shall not be in direct responsible charge of a water treatment, distribution, or bottled water system except as established in 401 KAR 8:030 and paragraph (d) of this section.
- (c) A certified operator with an Operator in Training designation shall work under the direct supervision of a certified operator who:
 - 1. Works at the same facility; and
- 2. Has obtained a certification level that is equal to or greater than the certification level required to serve in direct responsible charge of the facility.
- (d) An Operator In Training may have direct responsible charge for a water treatment or distribution system for which the operator holds an active Class II through Class IV certification required for the system as established in 401 KAR 8:030.
- Section 2. Water Operator Qualifications: Experience, Education, and Equivalencies. An individual desiring to become a certified operator shall meet the minimum education and experience requirements established in this section prior to the cabinet approving the individual to take a certification examination as established in 401 KAR 11:050.
 - (1) The minimum education and experience requirement for each class of water treatment

certification shall be as established in this subsection.

- (a) Limited certification The cabinet shall issue a limited certificate as established in KRS 223.160 if the applicant demonstrates the knowledge and experience required to properly operate the particular water treatment facility for which the applicant is responsible.
 - (b) Class IA-D treatment certification.
 - 1. A high school diploma or general education development (GED) certificate; and
- 2. One (1) year of operation of a Subclass A public water system with any design capacity as established in 401 KAR 8:030.
 - (c) Class IB-D treatment certification.
 - 1. A high school diploma or general education development (GED) certificate; and
- 2. One (1) year of operation of a Subclass A or B public water system with any design capacity as established in 401 KAR 8:030.
 - (d) Class IIA treatment certification.
 - 1. A high school diploma or general education development (GED) certificate; and
- 2. Two (2) years of operation of a water treatment plant, with six (6) months in a Class IIA, IIIA, or IVA water treatment plant, as established in 401 KAR 8:030.
 - (e) Class IIB-D treatment certification.
 - 1. A high school diploma or general education development (GED) certificate; and
- 2. Two (2) years of operation of a public water system, with six (6) months in a Class IA-D, II B-D, or higher water treatment plant, as established in 401 KAR 8:030.
 - (f) Class IIIA treatment certification.
 - 1. A high school diploma or general education development (GED) certificate; and
- 2. Three (3) years of operation of a public water treatment plant with one (1) year in a Class IIA, IIIA, or IVA water treatment plant, as established in 401 KAR 8:030, Section 2.
 - (g) Class IIIB treatment certification.
 - 1. A high school diploma or general education development (GED) certificate; and
- 2. Three (3) years of operation of a public water treatment plant with one (1) year in a Class IIA, IIB-D, IIIA, IIIB, IVA, or IVB water treatment plant, as established in 401 KAR 8:030, Section 2.
 - (h) Class IVA treatment certification.
- 1. A baccalaureate degree from a regionally accredited college or university in engineering, or biological, environmental, physical, or chemical science, or equivalent; and
- 2. One (1) year of operation of a Class IIIA or IVA public water treatment plant as established in 401 KAR 8:030, Section 2.
 - (i) Class IVB treatment certification.
- 1. A baccalaureate degree from a regionally accredited college or university in engineering, or biological, environmental, physical or chemical science, or equivalent; and
 - 2. One (1) year of operation of a Class IIIA, IIIB, IVA, or IVB public water treatment plant.
- (2) The educational and experience requirements for water distribution certifications shall be as established in this subsection.
 - (a) Class ID distribution certification.
 - 1. A high school diploma or general education development (GED) certificate; and
 - 2. One (1) year of operation of a water distribution system.
 - (b) Class IID distribution certification.
 - 1. A high school diploma or general education development (GED) certificate; and
 - 2. a.Two (2) years of operation of a water distribution system; and
- b. Six (6) months of the required experience shall be in a water distribution system serving a population greater than or equal to 1,500.

- (c) Class IIID distribution certification.
- 1. A high school diploma or general education development (GED) certificate; and
- 2. a. Three (3) years of operation of a water distribution system; and.
- b. One (1) year of the required experience shall be in a water distribution system serving a population greater than or equal to 1,500.
 - (d) Class IVD distribution certification.
- 1. A baccalaureate degree from a regionally accredited college or university in engineering, or biological, environmental, physical, or chemical science, or equivalent; and
- 2. One (1) year of operation of a water distribution system serving a population greater than or equal to 15,000.
- (3) Bottled water certification. The educational and experience requirements for bottled water certifications shall be:
 - (a) A high school diploma or general education development (GED) certificate; and
 - (b) One (1) year of operation of a bottled water system.
- (4) The educational and experience requirements for Operator in Training designations shall be as established in this subsection.:
- (a) Class IA-D Treatment, Class IB-D Treatment, Class ID Distribution, and Bottled Water certifications.
 - 1. A high school diploma or general education development (GED) certificate; and
 - 2. Experience shall not be required.
- (b) All other applicants for the classifications established in subsections 1(1) and 1(2) of this administrative regulation:
- 1. Shall have successfully qualified for and passed the certification exam of the same type classification at one (1) level lower than the Operator in Training designation being pursued; and
- 2. Shall not have been subject to disciplinary action as established in 401 KAR 11:050, Section 4.
- (5) Substitutions. The cabinet shall allow substitutions as established in this subsection for education and experience requirements as established in subsections (1), (2), and (3) of this section.
- (a) Education from a regionally accredited college or university in engineering, or biological, environmental, physical, or chemical science, or equivalent shall be substituted if the substitution does not exceed fifty (50) percent of the required experience.
 - 1. An associate degree shall be considered equivalent to two (2) years of experience.
 - 2. A baccalaureate degree shall be considered equivalent to four (4) years of experience.
- 3. Ten (10) contact hours, one (1) Continuing Education Unit, or one (1) postsecondary education quarter hour in any subject with a passing grade of C or higher shall substitute for 0.022 years of experience.
- 4. One (1) postsecondary education semester hour in any subject with a passing grade of C or higher shall substitute for 0.033 years of experience.
- (b) Education from a regionally accredited college or university that did not result in a degree in engineering or biological, environmental, physical, or chemical science, or equivalent may be substituted if the substitution does not exceed twenty-five (25) percent of the required experience.
 - 1. An associate degree may substitute for a maximum of one (1) year of experience.
 - 2. A baccalaureate degree may substitute for a maximum of two (2) years of experience.
- 3. Ten (10) contact hours, one (1) Continuing Education Unit, or one (1) post-secondary education guarter hour in any subject with a passing grade of C or higher shall be considered

equivalent to 0.011 years of experience.

- 4. One (1) postsecondary education semester hour with a passing grade of C or higher in any subject shall be considered equivalent to 0.016 years of experience.
- 5. Ten (10) contact hours, one (1) Continuing Education Unit, or one (1) postsecondary education quarter hour in engineering, mathematics, or biological, environmental, physical, or chemical science with a passing grade of C or higher shall substitute for 0.022 years of experience.
- 6. One (1) postsecondary education semester hour in engineering, mathematics or biological, environmental, physical, or chemical science with a passing grade of C or higher shall substitute for 0.033 years of experience.
- (c) Education applied to the experience requirements established in subsections (1) and (2) of this section shall not be applied to the education requirement.
- (d) Treatment and distribution experience may be substituted for the educational requirement as established in this paragraph.
- 1. One (1) year of operational experience at a water system may substitute for one (1) year of education.
- 2. a. The cabinet may allow partial substitution of the education requirement by experience in:
 - (i) Maintenance;
 - (ii) Laboratory analysis; or
- (iii) Other work related to the collection, treatment, or distribution of drinking water or wastewater.
- b. To establish the amount of experience that shall be accepted, the cabinet shall determine the degree of:
 - (i) Technical knowledge needed to perform the work; and
 - (ii) Responsibility the applicant had in the operation of the system.
- 3. Experience applied to the education requirement established in subsections (1) and (2) of this section shall not be applied to the experience requirement.
- (e) Water treatment, distribution and collection experience may be substituted as established in this paragraph.
- 1. Two (2) years of distribution system experience may be considered equivalent to one (1) year of treatment experience.
- 2. One (1) year of treatment experience may be considered equivalent to one (1) year of distribution system experience.
- 3. One (1) year of collection experience may be considered equivalent to six (6) months of distribution experience.
- 4. Substitutions under this paragraph shall not account for more than fifty (50) percent of the experience requirement.
- (f) Experience that is not related to water collection, treatment, or distribution may be substituted as established in this paragraph.
- 1. Two (2) years of experience in laboratory analysis may be considered equivalent to one (1) year of treatment experience or six (6) months of distribution experience.
- 2. Two (2) years of experience in the construction trades, construction management, engineering, plumbing, or electronics may be considered equivalent to one (1) year of distribution experience or six (6) months of treatment experience.
- 3. Work experience in an area or specialty unrelated to those established in this paragraph may be substituted for up to six (6) months of collection or treatment experience.
 - 4. To establish the amount of experience that shall be accepted, the cabinet shall determine

the degree of:

- a. Technical knowledge needed to perform the work; and
- b. Responsibility the applicant had in performing the work.
- 4. Substitutions under this paragraph shall not account for more than fifty (50) percent of the experience required by this administrative regulation.
- (6) Apprenticeships. An applicant who completes a state-approved treatment or distribution apprenticeship program as established in 401 KAR 11:050 may be eligible for treatment or distribution certification if the applicant also achieves a passing score of seventy (70) percent or above on a cabinet-administered examination.
- (7) Equivalency. An operator who has received water operator certification in a state, territory, or possession of the United States may be given an equivalent certification in Kentucky based on the:
- 1. Level of certification obtained in the other state, territory, or possession of the United States;
- 2. Number of years of water operator experience obtained while holding valid certification from another state, territory, or possession of the United States; and
- 3. Type, size, and capacity of the water plant or plants at which the certified operator obtained experience.
- (8) Reciprocity. The cabinet may establish a reciprocal agreement for operator certification with any other state, territory, or possession of the United States if the cabinet determines that operator certification requirements of the other state are at least as stringent as those established in this administrative regulation. (36 Ky.R. 1055; 1457; eff. 2-5-2010; TAm eff. 9-14-2018; Crt eff. 11-1-2018; 45 Ky.R. 3527; 46 Ky.R. 958, 1116; eff. 11-1-2019.)